



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,086	11/19/2003	Charles Q. Zhan	120 06739US	7034
128	7590	11/16/2006	EXAMINER	
HONEYWELL INTERNATIONAL INC.			SUN, XIUQIN	
101 COLUMBIA ROAD			ART UNIT	
P O BOX 2245			PAPER NUMBER	
MORRISTOWN, NJ 07962-2245			2863	

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,086

Applicant(s)

ZHAN ET AL.

Examiner

Xiuqin Sun

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 26 and 27 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, the recited "at least one of: storing, transmitting, and displaying the overall probability of the valve defect" is not described or supported by the specification of the instant application.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1, 9, 15, 22 and 24 are rejected under 35 U.S.C. 101 because they appear to be directed to an algorithm for determining an overall probability of a valve defect rather than a practical application of the algorithm in the real world. The claims do not produce any tangible results. The practical application of the claimed invention

Art Unit: 2863

cannot be realized until the determined probability is conveyed to the user. For the result to be tangible it would need to output to a user or displayed to a user or stored for later use. Hence the claims are treated as non-statutory subject matter (See MPEP Sec. 2106). To view the new guidelines for 35 U.S.C. 101 please view the following OG notice: <http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>

Claims 2-8, 10-14, 16-21, 23, and 25-27 are rejected under 35 U.S.C. 101 base on dependency.

Allowable Subject Matter

5. Claims 1-25 are allowed if rewritten to overcome the rejection under 35 U.S.C. 101 set forth above in this Office action.
6. Claims 26 and 27 are allowed if rewritten to overcome the rejection under 35 U.S.C. 112 and 35 U.S.C. 101 set forth above in this Office action.

Reasons for Allowance

7. The following is a statement of reasons for the indication of allowable subject matter:

Please see Office action dated 06/26/2006 for reasons for allowance of the claims in question.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

9. Applicant's arguments received 09/11/2006 have been considered and they are persuasive.

It is deemed that independent claims 1, 9, 15, 22 and 24 are directed to an algorithm for determining an overall probability of a valve defect itself rather than a practical application of the algorithm in the real world. The claims do not produce any tangible results. The practical application of the claimed invention cannot be realized until the determined probability is conveyed to the user. For the result to be tangible it would need to output to a user or displayed to a user or stored for later use. Hence the claims are treated as non-statutory subject matter (See MPEP Sec. 2106). To view the new guidelines for 35 U.S.C. 101 please view the following OG notice:

Art Unit: 2863

<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>. Claims 2-8, 10-14, 16-21, 23, 25-27 are rejected under 35 U.S.C. 101 base on dependency.

The new dependent claims 26 and 27, added with the intention to overcome the rejection of claims 1-8 under 35 U.S.C. 101, are rejected under 35 U.S.C. 112 as set forth above in this Office action. Therefore, the rejection of claims 1-8, 26 and 27 are maintained.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun


Application/Control Number: 10/717,086
Art Unit: 2863

Page 6

Examiner
Art Unit 2863

XS

November 9, 2006


John Barlow
Supervisory Patent Examiner
Technology Center 2800